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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,585	11/29/2003	Isidore Rigoutsos	YOR920030620US1	9905
7590	03/28/2007		EXAMINER	
Gail H. Zarick IBM Corporation Intellectual Property Law Dept. P.O. Box 218 Yorktown Heights, NY 10598			DANG, THANH HA T	
			ART UNIT	PAPER NUMBER
			2163	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/724,585	RIGOUTSOS ET AL.
Examiner	Art Unit	
Thanh-Ha Dang	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 January 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-64 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-64 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 November 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. Claims 1-64 are rejected in this Office Action.
2. This Action is made Final.

Response to Amendment

3. Receipt of Applicant's amendment filed 01/08/07 is acknowledged.
4. Applicant's amendment submitted on 01/08/07 overcomes the objections in connection with the Specification that were given in the Office Action dated 10/06/06. Examiner hereby withdraws the objections to the Specification given on the Office Action dated 09/06/06.
5. Applicant's amendment submitted on 01/08/07 does not overcome the 35 USC101 Claim Rejections that were given in the Office Action dated 10/06/06. Examiner hereby maintains the 35 USC101 rejection.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-30, 31-47 and 48-64 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

According to MPEP 2106 IV.B.2.: A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory

under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.

Claims 1-30 in view of the above cited MPEP section, are not statutory because the claims merely recite computing steps without producing any concrete and useful result and/or being limited to a practical application within the technological arts. Claim 1 recites a method for annotating a query email message comprising the steps of "accessing patterns ...; assigning attributes ... and using the patterns with assigned attributes to analyze the query email message" that merely describes a number of computing steps. The cited steps conclude with the step of "analyze the query email message" that does not provide useful, concrete, and tangible result. Therefore, the claim is directed to non-statutory subject matter under 35 USC101. Claims 2-30 are dependent of Claim 1, and therefore are rejected on the same grounds as claim 1.

Claims 31-47 in view of the above cited MPEP section, are not statutory because the claims merely recite computing steps without producing any concrete and useful result and/or being limited to a practical application within the technological arts. The claims lack the necessary physical articles or objects to

constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994). Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer"). Claim 31 recites an apparatus comprising "a memory; and at least one processor operative to access patterns . . . ; assign attribute . . . ; and using the patterns with assigned attributes to analyze the query email message" that merely describes a number of computing steps. The cited steps conclude with the step of "analyze the query

email message" that does not provide useful, concrete, and tangible result. Therefore, the claim is directed to non-statutory subject matter under 35 USC101. Claims 32-47 are dependent of Claim 31, and therefore are rejected on the same grounds as claim 31.

Claims 48-64 in view of the above cited MPEP section, are not statutory because the claims merely recite computing steps without producing any concrete and useful result and/or being limited to a practical application within the technological arts. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994). Merely claiming nonfunctional descriptive material, i.e., abstract ideas,

stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer"). Claim 48 recites an article of manufacture comprising a machine readable medium containing one or more programs which when executed implement the steps of "accessing patterns ... ; assigning attribute ... ; and using the patterns with assigned attributes to analyze the query email message" that merely describes a number of computing steps. The cited steps conclude with the step of "analyze the query email message" that does not provide useful, concrete, and tangible result. Further, the machine-readable medium is not limited to tangible embodiments. In view of Applicant's disclosure, Specification page 11--4th paragraph ("... The machine readable medium **may be a recordable medium or may be a transmission medium ...**"), wherein the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., floppy disks, memory cards, etc.) and intangible embodiments (e.g., radio-frequency channel). As such, the claim is not limited to statutory subject matter. Therefore, the claim is directed to non-statutory subject matter under 35 USC101. Claims 49-64 are dependent of Claim 48, and therefore are rejected on the same grounds as claim 48.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4-21, 27-42, 47-59 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,769,016 issued to Rothwell et al. ("Rothwell") and further in view of Pub. No. US2003/0195937 issued to Robert C. Kircher, Jr. ("Kircher").

As to **Claims 1, 31 and 48**, *Rothwell* teaches a method for annotating a query email message, the method comprising the steps of:

- accessing patterns associated with a database (*Figure 4, block412*) comprising annotated email messages (*column 4, lines 55-56*);
- *Rothwell does not explicitly teach* assigning attributes to the patterns based on the annotated email messages; and using the patterns with assigned attributes to analyze the query email message. However, Kircher teaches assigning attributes (*page 2 [0012]*) to the patterns based on the annotated email messages (*Figure 8 wherein block88c,e,g,h,j,l assign attributes and block88b,d,f,i,k teach pattern based on the annotated email messages*); and using the patterns with assigned attributes to analyze the query email message (*Figure 5C, page 7 [0064] wherein block84/84c uses attributes to analyze messages*). Thus, it would have been obvious to one of the ordinary skill in the art during the time the invention was made to combine intelligent message screening teaching of Kircher with intelligent spam detection system using an updateable neural analysis engine teaching of Rothwell in order to provide method and system which use spam and non-spam electronic mail patterns to classify and to validate electronic mail and messages.

As to **Claim 4**, *Rothwell in combination with Kircher teaches* wherein the steps of accessing patterns and assigning attributes are carried out independently of and prior to the step of using the patterns with assigned attributes to analyze the query email message (*Kircher, page 2 [0012] wherein*

each message assigned to one of a plurality of different categories that is equivalent to pattern with assigned attribute).

As to **Claims 5, 32, and 49**, *Rothwell in combination with Kircher* teaches further comprising the step of selecting the accessed patterns that match patterns in the query email message (*Rothwell, column 5, lines 19-22*).

As to **Claim 6**, *Rothwell in combination with Kircher* teaches further comprising the step of storing the patterns with assigned attributes in a database (*Rothwell, column 4, lines 55-56*).

As to **Claims 7, 33, and 50**, *Rothwell in combination with Kircher* teaches wherein the using step further comprises the step of defining an attribute vector from the patterns with assigned attributes, the attribute vector characterizing portions of the query email message (*Kircher, Figure 7, block86I, page 8 [0071]*).

As to **Claim 8**, *Rothwell in combination with Kircher* teaches wherein the using step further comprises the step of defining an attribute vector from the patterns with assigned attributes, the attribute vector characterizing the whole of the query email message (*Kircher, Figure 7, block86I, page 8 [0071]*).

As to **Claims 9, 34, and 51**, *Rothwell in combination with Kircher* teaches wherein one or more of said annotated email messages comprises an unwelcome email message ("SPAM") (*Rothwell, column 4, lines 55-56*).

As to **Claim 10**, *Rothwell in combination with Kircher* teaches further comprising the step of storing the patterns with assigned attributes in a database serving as a "SPAM-dictionary" (*Rothwell, column 4, lines 55-56*).

As to **Claims 11, 35, and 52**, *Rothwell in combination with Kircher teaches* wherein one or more of said annotated email messages comprises a welcome email message ("non-SPAM") (*Rothwell, column 6, line 17*).

As to **Claim 12**, *Rothwell in combination with Kircher teaches* further comprising the step of storing the patterns with assigned attributes in a database serving as a "SPAM-dictionary" (*Rothwell, column 6, line 15*).

As to **Claims 13, 36, and 53**, *Rothwell in combination with Kircher teaches* wherein said database comprises (i) a first subdatabase comprising annotated unwelcome email messages ("SPAM") (*Rothwell, column 6, line 15, wherein the archive is equivalent to a subdatabase*), and (ii) a second subdatabase comprising annotated welcome email messages ("non-SPAM") (*Rothwell, column 6, line 17, wherein the archive is equivalent to a subdatabase*).

As to **Claims 14, 37, and 54**, *Rothwell in combination with Kircher teaches* wherein the attribute vector comprises a number of counters (*Kircher, Figure 7 wherein block86d-k provide the number of counters*).

As to **Claims 15, 38, and 55**, *Rothwell in combination with Kircher teaches* wherein the query email message comprises characters of a human language and the number of counters is proportional to the number of said characters in the query email message (*Kircher, Figure 7, page 7 [0066]*).

As to **Claims 16, 39, and 56**, *Rothwell in combination with Kircher teaches* wherein the assigned attributes are used to contribute values to counters

of the attribute vector corresponding to portions of the query email message matched by the patterns (*Kircher, page 7 [0064]*).

As to **Claims 17, 40, and 57**, *Rothwell in combination with Kircher teaches* comprising a plurality of attribute vectors (*Kircher, Figure 7 [0066]*).

As to **Claim 18**, *Rothwell in combination with Kircher teaches* wherein the values contributed to the counters of each of the attribute vectors of the plurality of attribute vectors are normalized (*Kircher, Figure 7 [0066], wherein the counter is normalized*).

As to **Claims 19, 41, and 58**, *Rothwell in combination with Kircher teaches* wherein each attribute vector of the plurality of attribute vectors represents a different attribute (*Kircher, page 2 [0012] wherein different category represents different attribute*).

As to **Claims 20, 42, and 59**, The method of claim 17, wherein the plurality of attribute vectors are ranked (*Rothwell, Table 4, column 7, lines 40-51*).

As to **Claim 21**, *Rothwell in combination with Kircher teaches* wherein only highly ranking attribute vectors are kept (*Rothwell, Table 4, column 7, lines 40-51*).

As to **Claims 27, 47 and 64**, *Rothwell in combination with Kircher teaches* further comprising the step of determining a score for the patterns with assigned attributes used to contribute to the attribute vector, said database comprising (i) a first subdatabase comprising annotated unwelcome email messages ("SPAM")

(Rothwell, column 6, line 15, wherein the archive is equivalent to a database), and (ii) a second subdatabase comprising annotated welcome email messages ("non-SPAM") (Rothwell, column 6, line 17, wherein the archive is equivalent to a database), said score representing a degree of similarity, between the query email message and at least one of said annotated unwelcome email messages ("SPAM") (Kircher, Figures 7-12, page 9 wherein [0076-84] wherein the score determines similarity degree between email messages); and a degree of dissimilarity between the query email message and at least one of said annotated welcome email messages ("non-SPAM") (Kircher, Figures 7-12, page 9 wherein [0076-84] wherein the score represents dissimilarity degree between email messages).

As to **Claim 28**, *Rothwell in combination with Kircher teaches further comprising the step of defining, for each of said assigned attributes, a value criterion based on the value of the counters of the attribute vector to determine whether the corresponding attribute is present in the query email message (Rothwell, Figures 3-4, column 4, lines 47-59).*

As to **Claim 29**, *Rothwell in combination with Kircher teaches further including the step of defining a SPAM attribute criterion dependent on which of said assigned attributes are present in the query email message, to determine whether the query email message is a SPAM email message (Rothwell, Example 1, column 5, lines 1-10).*

As to **Claim 30**, *Rothwell in combination with Kircher teaches* further including the step of defining a non-SPAM attribute criterion dependent on which of said assigned attributes are present in the query email message, to determine whether the query email message is a non-SPAM email message (*Rothwell, Example 1, column 5, lines 1-10*).

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,769,016 issued to Rothwell et al. ("Rothwell") and further in view of Pub. No. Us2003/0195937 issued to Robert C. Kircher, Jr. ("Kircher") as applied to Claim 1 above, and further in view of U.S. Patent Number 6,446,011 issued to Floratos et al. ("Floratos").

As to **Claims 2 and 3**: *Rothwell in combination with Kircher teaches* all the limitations disclosed in claim 1, except for the pattern discovery algorithm which is Teiresias. However, *Floratos teaches* wherein the pattern discovery algorithm is the Teiresias pattern algorithm (*column 7, lines 1-55*). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to use Teiresias' pattern algorithm teaching of Floratos with intelligent message screening teaching of Kircher and intelligent spam detection system using an updateable neural analysis engine teaching of Rothwell to provide method and system which detect repeating patterns in order to analyze and classify electronic messages.

Claims 22-26, 43-46 and 60-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,769,016 issued to Rothwell et al. ("Rothwell") and further in view of Pub. No. Us2003/0195937 issued to Robert C. Kircher, Jr. ("Kircher") as applied to Claims 1, 31, and 48 above respectively, and further in view of Pub. No. US2005/0081059 issued to Bandini et al. ("Bandini").

As to Claims 22, 43, and 60:

Rothwell in combination with Kircher teaches all the elements of Claims 1, 31 and 48 above respectively.

Rothwell in combination with Kircher does not explicitly teach further comprising the step of determining a score for the patterns with assigned attributes used to contribute to the attribute vector.

Bandini teaches further comprising the step of determining a score for the patterns with assigned attributes used to contribute to the attribute vector (Figure 3 comprises the step of determining a score for the pattern with assigned attribute, page 5 [0039]).

It would have been obvious to one of the ordinary skill in the art during the time the invention was made to combine method and system for e-mail filtering teaching of Bandini with intelligent message screening teaching of Kircher and intelligent spam detection system using an updateable neural analysis engine teaching of Rothwell in order to provide an enhancement to the current method and system which determines and scores electronic mail patterns.

As to **Claims 23, 44, and 61**, *Rothwell, Kircher in combination with Bandini* teaches wherein the score represents a degree of similarity between the query email message and at least one annotated email message of the database (*Kircher, Figures 7-12, page 9 wherein [0076-84] wherein the score represents similarity degree between email messages*).

As to **Claim 24**, *Rothwell, Kircher in combination with Bandini* teaches wherein the score is normalized (*Kircher, Figure 12 wherein the score is normalized*).

As to **Claims 25, 45, and 62**, *Rothwell, Kircher in combination with Bandini* teaches wherein the score represents a degree of similarity between the query email message and at least one annotated email message of the database, and wherein said at least one of said annotated email messages comprises an unwelcome email message ("SPAM") (*Bandini, page 5 [0039 and 0041]*).

As to **Claims 26, 46, and 63**, *Rothwell, Kircher in combination with Bandini* teaches wherein the score represents a degree of similarity between the query email message and at least one annotated email message of the database, and wherein said at least one of said annotated email messages comprises a welcome email message ("non-SPAM") (*Figure 3-block78, page 5 [0038] wherein email reporting as clean is equivalent to non-spam*).

Citation of Pertinent PriorArt

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
1. Shimizu et al. (Pub. No. US2005/0223315), "Information Sharing Device and Information Sharing Method".
2. Zaher et al. (Pub. No. US2005/0091027), "System and Method For Processing Digital Annotations".
3. Petry et al. (Pub. No. US2006/0195537), "Systems and Methods for Managing Directory Harvest Attacks via Electronic Messages".
4. Brown, Jr. et al. (Pub. No. US2005/0188018), "System for Managing E-mail Traffic".
5. Irlam et al. (US Patent No. 6,650,890), "Value-Added Electronic Messaging Services and Transparent Implementation Thereof Using Intermediate Server".
6. Gordon et al. (US Patent No. 6,732,157), "Comprehensive Anti-SPAM System, Method, and Computer Program Product for Filtering Unwanted E-Mail Messages".
7. Jeffrey Owen Kephart (US Patent No. 6,732,149), "System and Method for Hindering Undesired Transmission or Receipt of Electronic Messages".
8. Hoyt a. Fleming, III (US Patent No. 6,249,805), "Method and System for Filtering Unauthorized Electronic Mail Messages".
9. Jeffrey Nelson Heiner (US Patent No. 6,112,227), "Filter-In Method for Reducing Junk E-Mail".

10. Albert L. Donaldson (US Patent No. 6,321,267), "Method and Apparatus for Filtering Junk Email".
11. Greaves et al. (Pub. No. US2005/0111446), "Network Message Filtering Using Hashing and Pattern Matching".

Response to Arguments

12. Applicant's arguments filed 01/08/07 have been fully considered but they are not persuasive. Examiner respectfully maintains the rejection cited for the following reasons:

- Applicant argues: on paragraph 2 of page 15, with respect to claims 1, 31 and 48 that "Kircher cited by the Office Action actually teaches that attributes are extracted not assigned".

Examiner responds: Examiner is not persuaded. Kircher teaches in Figure 5C wherein block84 displays message attributes which correspond to assigned attributes. Also, Kircher on page 2 [0012] wherein determinable attributes read on assigned attributes, and Figure 8 illustrates assigned attributes.

- Applicant argues: on paragraph 2 of page 15, with respect to claims 1, 31 and 48 that "the Office Action concludes that the combination would have been obvious on the alleged motivation "in order to provide [sic,a] method and system to classify and to validate electronic email and messages." The Office Action reaches this conclusion without providing a shred of evidence in

support. Without such evidence a rejection based on obviousness is improper because an inappropriate use of hindsight is used."

Examiner responds: In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

For the above reasons, Examiner believed that rejection of the last Office action was proper.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

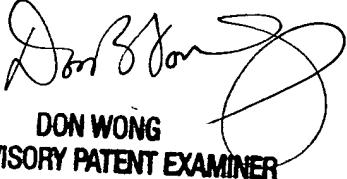
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Ha Dang whose telephone number is 571-272-4033. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thanh-Ha Dang
Examiner
Art Unit 2163


DON WONG
SUPERVISORY PATENT EXAMINER
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